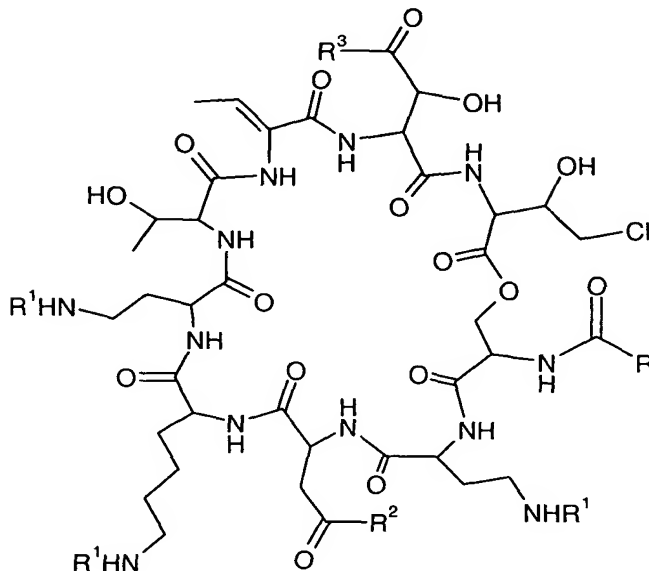


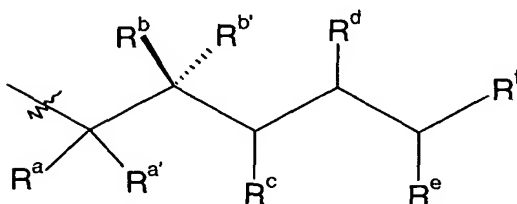
CLEAN CLAIM SET

1. A pseudomycin prodrug having the following structure:



wherein

R is



where

R^a and $R^{a'}$ are independently hydrogen or methyl, or either R^a or $R^{a'}$ is alkyl amino, taken together with R^b or $R^{b'}$ forms a six-membered cycloalkyl ring, a six-membered aromatic ring or a double bond, or taken together with R^c forms a six-membered aromatic ring;

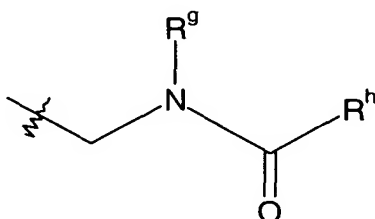
R^b and $R^{b'}$ are independently hydrogen, halogen, or methyl, or either R^b or $R^{b'}$ is amino, alkylamino, α -acetoacetate, methoxy, or hydroxy;

R^c is hydrogen, hydroxy, C_1 - C_4 alkoxy, hydroxyalkoxy, or taken together with R^e forms a 6-membered aromatic ring or C_5 - C_6 cycloalkyl ring;

R^e is hydrogen, or taken together with R^f is a six-membered aromatic ring, C_5 - C_{14} alkoxy substituted six-membered aromatic ring, or C_5 - C_{14} alkyl substituted six-membered aromatic ring, and

R^f is C_8 - C_{18} alkyl, C_5 - C_{11} alkoxy or biphenyl;

R is

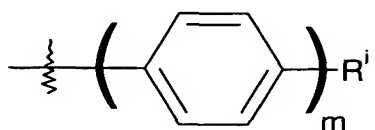


where

R^g is hydrogen, or C_1 - C_{13} alkyl, and

R^h is C_1 - C_{15} alkyl, C_4 - C_{15} alkoxy, $(C_1$ - C_{10} alkyl)phenyl, $-(CH_2)_n$ -aryl, or $-(CH_2)_n$ -(C_5 - C_6 cycloalkyl), where $n = 1$ or 2 ; or

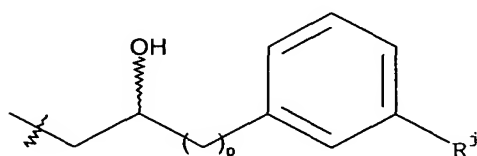
R is



where

R^i is a hydrogen, halogen, or C_5 - C_8 alkoxy, and m is 1, 2 or 3;

R is

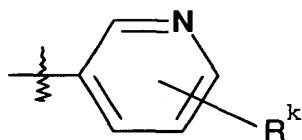


where

R^j is C_5 - C_{14} alkoxy or C_5 - C_{14} alkyl, and

$p = 0, 1$ or 2 ;

R is



where

R^k is C_5 - C_{14} alkoxy; or

R is $-(CH_2)-NR^m-(C_{13}-C_{18} \text{ alkyl})$, where R^m is H, $-CH_3$ or

$-C(O)CH_3$;

R^1 is independently hydrogen, an acyloxymethylene-1,3-dioxolen-2-one, or an acyloxymethylenecarboxylate, provided that at least one R^1 is an acyloxymethylene-1,3-dioxolen-2-one or an acyloxymethylenecarboxylate;

R^2 and R^3 are independently $-OR^{2a}$ or $-N(R^{2b})(R^{2c})$,

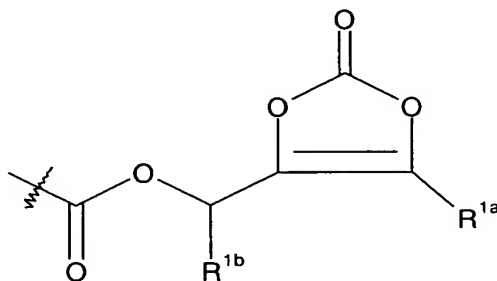
where

R^{2a} and R^{2b} are independently hydrogen, C_1 - C_{10} alkyl, C_3 - C_6 cycloalkyl, hydroxy(C_1 - C_{10})alkyl, alkoxy(C_1 - C_{10})alkyl, C_2 - C_{10} alkenyl, amino(C_1 - C_{10})alkyl, mono- or di-alkylamino(C_1 - C_{10})alkyl, aryl(C_1 - C_{10})alkyl, heteroaryl(C_1 - C_{10})alkyl, cycloheteroalkyl(C_1 - C_{10})alkyl, or

R^{2b} is an alkyl carboxylate residue of an aminoacid alkyl ester and R^{2c} is hydrogen or C_1 - C_6 alkyl; and

pharmaceutically acceptable salts and solvates thereof.

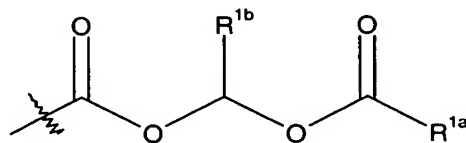
2. The prodrug of Claim 1 wherein said acyloxymethylene-1,3-dioxolen-2-one is represented by structure 1(a):



1(a)

where R^{1a} is C_1 - C_{10} alkyl, C_1 - C_{10} alkenyl, benzyl, or aryl and R^{1b} is hydrogen or methyl.

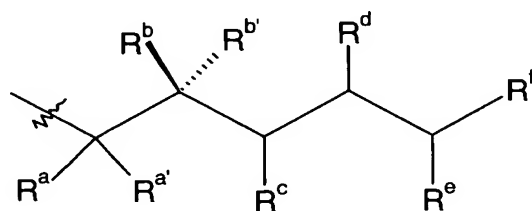
3. The prodrug of Claim 1 wherein said acyloxymethylenecarboxylate is represented by structure 1(b):



1(b)

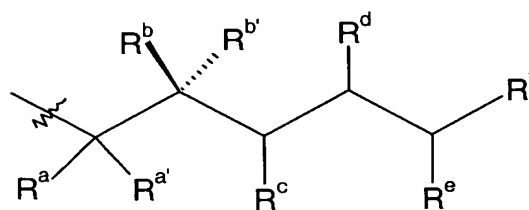
where R^{1a} is C_1 - C_{10} alkyl, C_1 - C_{10} alkenyl, benzyl, or aryl and R^{1b} is hydrogen or methyl.

4. The prodrug of Claim 2 wherein R is represented by the structure



where $R^{b'}$ is hydroxy, R^a , $R^{a'}$, R^b , R^c , R^d , and R^e are all hydrogen, and R^f is n-octyl.

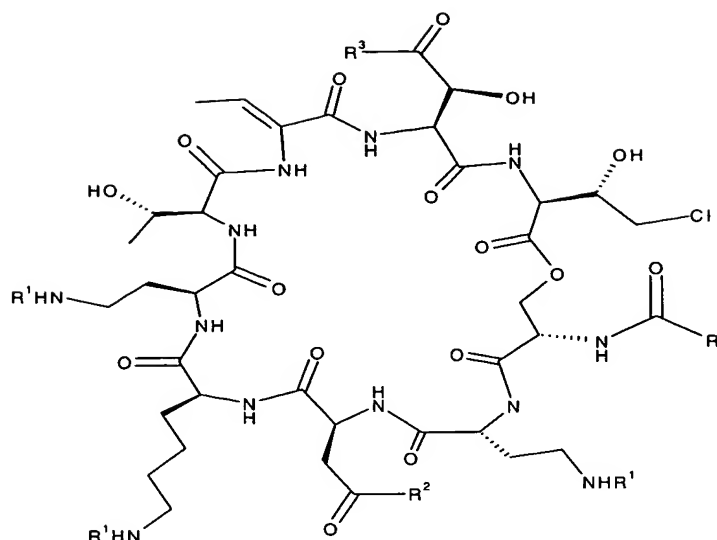
5. The prodrug of Claim 3 wherein R is represented by the structure



where $R^{b'}$ is hydroxy, R^a , $R^{a'}$, R^b , R^c , R^d , and R^e are all hydrogen, and R^f is n-octyl.

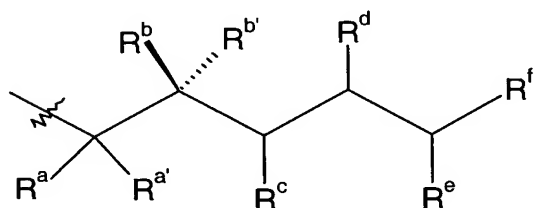
6. The prodrug of Claim 1 wherein said alkyl carboxylate residue of an aminoacid alkyl ester is represented by $-CH_2CO_2CH_3$, $-CH(CO_2CH_3)CH(CH_3)_2$, $-CH(CO_2CH_3)CH(\text{phenyl})$, $-CH(CO_2CH_3)CH_2OH$, $-CH(CO_2CH_3)CH_2(p\text{-hydroxyphenyl})$, $-CH(CO_2CH_3)CH_2SH$, $-CH(CO_2CH_3)CH_2(CH_2)_3NH_2$, $-CH(CO_2CH_3)CH_2(4\text{-imidazole})$, $-CH(CO_2CH_3)CH_2(5\text{-imidazole})$, $-CH(CO_2CH_3)CH_2CO_2CH_3$, or $-CH(CO_2CH_3)CH_2CO_2NH_2$.

7. A pseudomycin prodrug having the following structure:



wherein

R is



where

R^a and $R^{a'}$ are independently hydrogen or methyl, or either R^a or $R^{a'}$ is alkyl amino, taken together with R^b or $R^{b'}$ forms a six-membered cycloalkyl ring, a six-membered aromatic ring or a double bond, or taken together with R^c forms a six-membered aromatic ring;

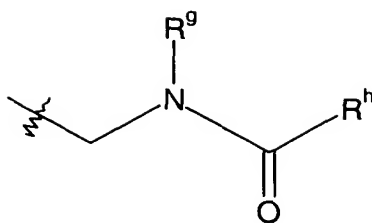
R^b and $R^{b'}$ are independently hydrogen, halogen, or methyl, or either R^b or $R^{b'}$ is amino, alkylamino, α -acetoacetate, methoxy, or hydroxy;

R^c is hydrogen, hydroxy, C_1 - C_4 alkoxy, hydroxyalkoxy, or taken together with R^e forms a 6-membered aromatic ring or C_5 - C_6 cycloalkyl ring;

R^e is hydrogen, or taken together with R^f is a six-membered aromatic ring, C_5 - C_{14} alkoxy substituted six-membered aromatic ring, or C_5 - C_{14} alkyl substituted six-membered aromatic ring, and

R^f is C_8 - C_{18} alkyl, C_5 - C_{11} alkoxy or biphenyl;

R is

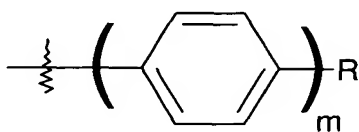


where

R^g is hydrogen, or C_1 - C_{13} alkyl, and

R^h is C_1 - C_{15} alkyl, C_4 - C_{15} alkoxy, $(C_1$ - C_{10} alkyl)phenyl, $-(CH_2)_n$ -aryl, or $-(CH_2)_n$ -(C_5 - C_6 cycloalkyl), where $n = 1$ or 2 ; or

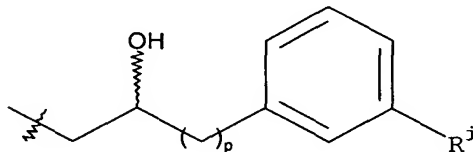
R is



where

R^i is a hydrogen, halogen, or C_5 - C_8 alkoxy, and m is 1, 2 or 3;

R is

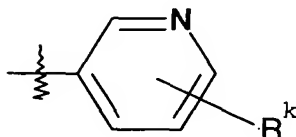


where

R^j is C_5 - C_{14} alkoxy or C_5 - C_{14} alkyl, and

$p = 0, 1$ or 2 ;

R is



where

R^k is C_5 - C_{14} alkoxy; or

R is $-(CH_2)-NR^m$ -(C_{13} - C_{18} alkyl), where R^m is H, $-CH_3$ or $-C(O)CH_3$;

R^1 is independently hydrogen, an acyloxymethylene-1,3-dioxolen-2-one, or an acyloxymethylenecarboxylate, provided that at least one R^1 is an acyloxymethylene-1,3-dioxolen-2-one or an acyloxymethylenecarboxylate;

R^2 and R^3 are independently $-OR^{2a}$ or $-N(R^{2b})(R^{2c})$,

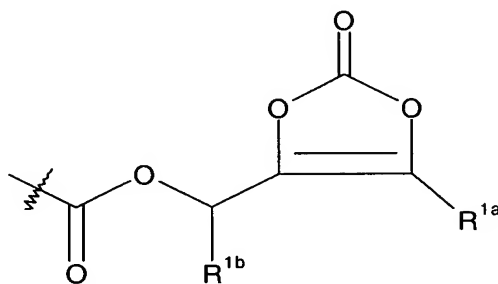
where

R^{2a} and R^{2b} are independently hydrogen, C_1 - C_{10} alkyl, C_3 - C_6 cycloalkyl, hydroxy(C_1 - C_{10})alkyl, alkoxy(C_1 - C_{10})alkyl, C_2 - C_{10} alkenyl, amino(C_1 - C_{10})alkyl, mono- or di-alkylamino(C_1 - C_{10})alkyl, aryl(C_1 - C_{10})alkyl, heteroaryl(C_1 - C_{10})alkyl, cycloheteroalkyl(C_1 - C_{10})alkyl, or

R^{2b} is an alkyl carboxylate residue of an aminoacid alkyl ester and R^{2c} is hydrogen or C_1 - C_6 alkyl; and

pharmaceutically acceptable salts and solvates thereof.

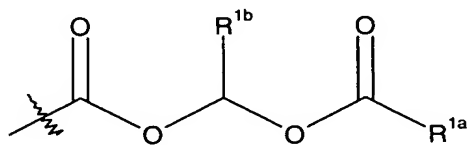
8. The prodrug of Claim 7 wherein said acyloxymethylene-1,3-dioxolen-2-one is represented by structure 1(a):



1(a)

where R^{1a} is C_1 - C_{10} alkyl, C_1 - C_{10} alkenyl, benzyl, or aryl and R^{1b} is hydrogen or methyl.

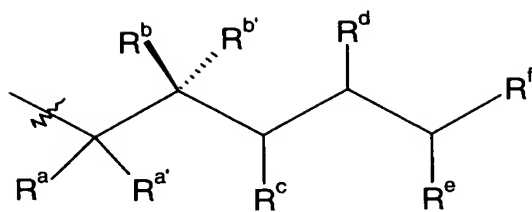
9. The prodrug of Claim 7 wherein said acyloxymethylenecarboxylate is represented by structure 1(b):



1(b)

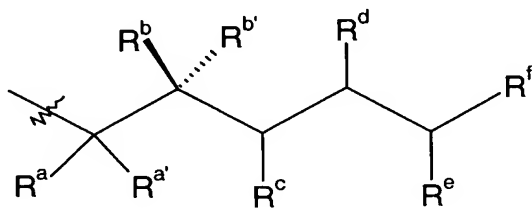
where R^{1a} is C_1 - C_{10} alkyl, C_1 - C_{10} alkenyl, benzyl, or aryl and R^{1b} is hydrogen or methyl.

10. The prodrug of Claim 8 wherein R is represented by the structure



where $R^{b'}$ is hydroxy, R^a , $R^{a'}$, R^b , R^c , R^d , and R^e are all hydrogen, and R^f is n-octyl.

11. The prodrug of Claim 9 wherein R is represented by the structure



where $R^{b'}$ is hydroxy, R^a , $R^{a'}$, R^b , R^c , R^d , and R^e are all hydrogen, and R^f is n-octyl.

12. The prodrug of Claim 7 wherein said alkyl carboxylate residue of an aminoacid alkyl ester is represented by $-\text{CH}_2\text{CO}_2\text{CH}_3$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}(\text{CH}_3)_2$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}(\text{phenyl})$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2\text{OH}$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2(p\text{-hydroxyphenyl})$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2\text{SH}$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2(\text{CH}_2)_3\text{NH}_2$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2(4\text{-imidazole})$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2(5\text{-imidazole})$, $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2\text{CO}_2\text{CH}_3$, or $-\text{CH}(\text{CO}_2\text{CH}_3)\text{CH}_2\text{CO}_2\text{NH}_2$.

14. A pharmaceutical formulation comprising said pseudomycin prodrug or said pharmaceutically acceptable salt or solvate thereof as in Claim 1 and a pharmaceutically acceptable carrier, buffer, diluent, or excipient.

15. A medicament for treating a fungal infection in an animal wherein said medicament comprises said pseudomycin prodrug or said pharmaceutically acceptable salt or solvate thereof of Claim 1.

16. A method for treating a fungal infection in an animal in need thereof, comprising administering to said animal said pseudomycin prodrug or said pharmaceutically acceptable salt or solvate thereof of Claim 7.

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